



Short Communication

Range extension of *Sigatica pomatiella* (Melvill, 1893) (Naticidae: Littorinimorpha) to northern east coast of India

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Abstract

The present paper focus on the first report of the Moon shell, *Sigatica pomatiella* (Melvill, 1893) obtained from the northern east coast of India. Previously this species was recorded from the type locality (Maharashtra coast) and Tamil Nadu coast only. Present collection is made for the first time from Chandipur beach of Odisha coast.

Keywords: Chandipur Beach, First Report, Moon Shell, Odisha Coast, Predatory Snail

Introduction

The family Naticidae is commonly known as the Moon shell or Necklace shell. Size of these predatory sea snails under the order Littorinimorpha varies from minute to large. Body whorl of the snail is large, surface smooth or polished, beautiful colour pattern of shell, and columella with callus deposition. In India, 36 species belonging to the family Naticidae are reported so far (Dey, 2016). The genus *Sigatica* Meyer & Aldrich, 1886 belonging to this family is represented by six species worldwide (MolluscaBase, 2018). *Sigatica pomatiella* (Melvill, 1893) is the only species of this genus reported from Indian coast, from Bombay coast (type locality) and Tamil Nadu (Mookherjee, 1985; Dey, 2016). Remarkable study on the mollusca of Odisha coast was carried out by Subba Rao *et al.* (1991). Recently, the checklist of 496 species of marine and estuarine mollusc was updated by Tudu *et al.* (2018) from this coast. As per the previous studies, it is confirmed that *Sigatica pomatiella* hitherto not recorded from Odisha coast. The present report forms its first record from Odisha coast and extends its geographic distribution to northern east coast of India.

Material and Methods

Two empty dry shells were collected from wide intertidal zone of Chandipur beach (21°27'01.00" N, 87°02'37.22" E), collected by the authors on 11th May 2018. The shells are dry

preserved in a sample container and deposited at National Zoological Collections of Marine Aquarium and Regional Centre (MARC), Zoological Survey of India (ZSI), Digha, West Bengal (MARC/ZSI/M5680). The photograph was taken with Sony digital camera (DSC H x 400v with GPS) and measurements are taken with Vernier caliper (Mitutoyo, Japan). The plate (Figure 1) was prepared by Adobe Photoshop using lasso tool for removing the background. Identification and classification follows Melvill (1893), Kabat (2000) and Bouchet *et al.* (2017).

Results

Systematic Account

Order LITTORINIMORPHA

Super family NATICOIDEA

Family NATICIDAE Guilding, 1834

Subfamily SININAE Woodring, 1928

Genus *Sigatica* Meyer and Aldrich, 1886

Type species: *Sigaretus (Sigatica) boettgeri* Mayer & Aldrich, 1886

Sigatica pomatiella (Melvill, 1893) (Fig.1, a-c)

1893. *Naticina pomatiella* Melvill, *Mem. Manchr. Soc.* 62; Pl. 1, fig. 18.

1985. *Eunaticina pomatiella*: Mookherjee, *Rec. zool. Surv. India, Occ. Paper* 75: 6.

2016. *Polinices (Sigatica) pomatiella*: Dey, *Catalogue of marine molluscs*, 239; fig. 539 -540.

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Diagnosis: Shell medium size, height 12.45 - 13.55 mm and width 10.15 - 11.10 mm, narrow but deeply umbilicated, apparently smooth and white; suture deep; mouth simple. The transverse groove may not be visible by naked eye but distinguishable under the microscope. It has 7-10 striae in the subsutural and umbilical regions; umbilical callus narrow, which never extends over the umbilicus (Kabat, 2000). Colour of the shell whitish inside and outside, operculum reddish brown.

Distribution: Bombay [Mumbai] (type locality), Maharashtra (Melvill, 1893), Tamil Nadu (Mookherjee, 1985; Dey, 2016), Odisha (Present collection).

Discussion

This species is morphologically similar with another congener *Sigatica peleum* (Iredale, 1929) available in the Indo-Pacific region, but these two can be readily differentiated by few characters. *Sigatica peleum* is having more number of striae (about 30) across the entire outer whorl, a large triangular to blunt rounded callus which project over the central portion of umbilicus and the colour of operculum is yellowish brown (Kabat, 2000).

Since, *S. pomatiella* was earlier reported only from Maharashtra and Tamil Nadu coast, the present report

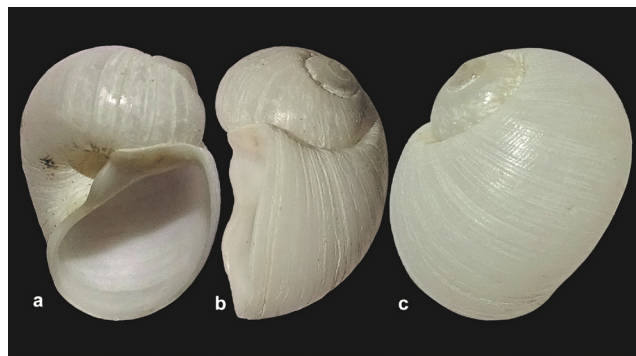


Figure 1. a-c: *Sigatica pomatiella* (Melvill, 1893) (Height 12.45mm and width 10.15mm).

extends its distributional range to the north-east coast of India with first record from Odisha coast.

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